# Tim Schoof, PhD

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Education	
Ph.D., University College London (Speech, Hearing and Phonetic Sciences)	2014
MRes, University College London (Speech, Language and Cognition)	2011
MA, Utrecht University (Linguistics)	2010
BA, University of Groningen (English Language and Literature)	2007

#### Academic and research experience

Research Associate Jan 2017 - present

University College London, Speech Hearing and Phonetic Sciences

Postdoctoral Fellow May 2015 – Dec 2016

Hearing Aid Laboratory, Department of Communication Sciences and Disorders,

Northwestern University

Postdoctoral Fellow Oct 2014 - Apr 2015

University College London Speech, Hearing and Phonetic Sciences

### **Publications**

- Schoof, T., and Rosen, S. (2016). The role of age-related declines in subcortical auditory processing in speech perception in noise. *Journal of the Association for Research in Otolaryngology*, 17(5), 441-460.
- Schoof, T., and Rosen, S. (2015). High sentence predictability increases the fluctuating masker benefit. *Journal of the Acoustical Society of America*, 138, EL181.
- Schoof, T., and Rosen, S. (2014). The role of auditory and cognitive factors in understanding speech in noise by normal-hearing older adults. *Frontiers in Aging Neuroscience*, 6:307.
- Schoof, T., Green, T., Faulkner, A., and Rosen, S. (2013). Advantages from bilateral hearing in speech perception in noise with simulated cochlear implants and residual acoustic hearing. *Journal of the Acoustical Society of America*, 133(2), 1017 1030.

#### Presentations

- Schoof, T., Souza, P., Anderson, M., Arehart, K. (2017). Individual differences in susceptibility to hearing aid distortion (invited talk). Science Space Seminar, National Institute for Health Research Nottingham Hearing Biomedical Research Unit, Nottingham, UK.
- Schoof, T. (2017). Enhancing transparency and reproducibility of hearing science (poster). American Auditory Society, Scottsdale, AZ, USA.
- Schoof, T., Souza, P., Anderson, M., Arehart, K. (2017). Variability in hearing aid outcomes in older adults (talk). Speech Science Forum, University College London, London, UK.
- Calcus A., Schoof T., Rosen S, Shinn-Cunningham B, Souza P. (2017). Isolating the informational component of speech-on-speech masking (poster). Speech Perception in Noise workshop, Oldenburg, Germany.
- Schoof T, Calcus A, Rosen S, Shinn-Cunningham B, Souza P. (2016). Isolating the informational component of speech-on-speech masking (poster). Acoustical Society of America, Honolulu, HI, USA.
- Souza, P., Schoof, T., Anderson, M., and Arehart, K. (2016). Variability in hearing aid outcomes in older adults: Clinical trial design and preliminary results (poster). International Hearing Aid Conference, Tahoe City, CA, USA.
- Schoof, T., and Rosen, S. (2016). Neural origins of the Frequency Following Response to resolved and unresolved modulated tones (poster). Frequency Following Response Workshop, Boston, MA, USA.
- Souza, P., Shen, J., and Schoof, T. (2015). Does noise reduction reduce listening effort for older hearing-aid users? (talk). Aging and Speech Communication Conference, Bloomington, IN, USA.
- Schoof, T., and Rosen, S. (2015). The role of auditory and cognitive processing in the perception of speech in noise by normal-hearing older adults (invited talk). Auditory Research Laboratory, Newcastle University, UK.
- Schoof, T., Rosen, S., and de Cheveigné, A (2015). Rapid FFR: A new technique to rapidly collect the Frequency Following Response (poster). ARO MidWinter Meeting 2015, Baltimore, MD, USA.
- Schoof, T., and Rosen, S (2015). The role of age-related declines in subcortical auditory processing in speech perception in noise (invited talk). Seminar series of the Department of Bioengineering, Imperial College London, London, UK.
- Schoof, T., Rosen, S., and de Cheveigné, A (2014). Rapid FFR: A new technique to rapidly collect the Frequency Following Response (poster). Frequency Following Response Workshop, London, UK.
- Schoof, T. (2014). Speech ABRs in an ageing population (invited talk). APD Masterclass, Auditory processing disorders: Current science and clinical practice, University College London, London, UK.

- Walczak, E., Zhang, J., Schoof, T., Tuomainen, J., Howell, P (2014). Cortical influences on the brainstem Frequency Following Response in Mandarin fall and rise tone production (poster). International Seminar on Speech Production, Cologne, Germany.
- Schoof, T., and Rosen, S (2014). Speech perception in noise: The role of age-related declines in auditory and cognitive processing (talk). Hearing Aid Laboratory, Northwestern University, Evanston, IL, USA.
- Schoof, T., and Rosen, S (2013). The role of age-related declines in auditory and cognitive processing in understanding speech in noise (talk). Speech Science Forum, University College London, London, UK.
- Schoof, T., and Rosen, S (2013). The role of age-related declines in auditory and cognitive processing in understanding speech in noise (poster). Aging and Speech Communication Conference, Bloomington, IN, USA.
- Schoof, T., and Rosen, S (2013). The relative contribution of declines in auditory and cognitive processing to speech perception difficulties in noise in older adults (talk). British Society of Audiology Annual Conference, Keele, UK.
- Schoof, T., and Rosen, S (2013). The role of subcortical encoding in accounting for speech perception in steady-state and amplitude-modulated noise (poster). ARO MidWinter Meeting, Baltimore, MD, USA.
- Schoof, T., and Rosen, S (2012). Effects of ageing on subcortical encoding of speech in noise (poster). C4AR International Conference. Ageing: Moving Beyond Boundaries. 2012, Lancaster, UK.
- Schoof, T., Green, T., Faulkner, A., and Rosen, S (2010). Binaural advantage for perceiving speech in noise with simulated bilateral and bimodal hearing devices (talk). Twist Student Conference for Linguistics, University of Leiden, Leiden, The Netherlands.
- Schoof, T., Green, T., Faulkner, A., and Rosen, S (2010). Binaural advantage for perceiving speech in noise with simulated bilateral and bimodal hearing devices (talk). Improving Cochlear Implant Performance Meeting, University College London Ear Institute, London, UK.

### Grants and awards

2016 Schoof, T. Isolating the informational component of speech-on-speech masking. Knowles Postdoctoral Fellow Travel Award, Northwestern University, \$1000.

Schoof, T. Isolating the informational component of speech-on-speech masking. Postdoctoral Professional Development Travel Award, Northwestern University, \$500.

Schoof, T., and Boothalingam, S. *Talk Global: Communication across borders*. Professional Development Grant, Northwestern University, \$1000.

Boothalingam, S., and Schoof, T. *Talk Global: Communication across borders*. Catalyst Grant, Northwestern University, \$500.

Schoof, T., Calcus, A., Shinn-Cunningham, B. *Workshop on the Frequency Following Response*, Intelligent Hearing Systems, \$2000

Calcus, A., Schoof, T., and Shinn-Cunningham, B. *Frequency Following Response Workshop*, COMIC Award, Compnet, Boston University, \$7400

- Schoof, T., and Souza, P. ASHA Research mentoring-pair travel award. ASHA Convention 2015, \$1000.
- 2014 Schoof, T., and Rosen, S. Rapid FFR: developing a clinical tool for the rapid assessment of subcortical processing of complex sounds. Pauline Ashley Small Project Grant, Action on Hearing Loss, £28916

Schoof, T. The role of age-related auditory and cognitive declines in understanding speech in noise. ARO Travel Award: Graduate Student/Postdoctoral Fellow, ARO. \$500

Calcus, A., Colin, C., Schoof, T., and Rosen, S. *Workshop on the Frequency Following Response*. Organisation d'une reunion scientifique, Le Fonds de la Recherche Scientifique (FNRS), €3000

Schoof, T., Calcus, A., and Rosen, S. *Workshop on the Frequency Following Response*, Support for short meetings and conferences, Guarantors of Brain, £1500

Calcus, A., Schoof, T., and Rosen, S. Workshop on the Frequency Following Response, Brain Products & Brain Vision UK, £3000

- 2013 Schoof, T. The relative contribution of declines in auditory and cognitive processing to speech perception difficulties in noise in older adults. Student Scholarship. Aging and Speech Communication Conference. \$1000
  - Schoof, T. The relative contribution of declines in auditory and cognitive processing to speech perception difficulties in noise in older adults. University College London Graduate School Student Conference Fund (Minor). £80
  - Schoof, T. The role of subcortical encoding in accounting for speech perception in steady-state and amplitude-modulated noise. ARO Travel Award: Graduate Student/Postdoctoral Fellow, ARO. \$500

Schoof, T. The role of subcortical encoding in accounting for speech perception in steady-state and amplitude-modulated noise. Defeating deafness ARO travel fellowship, Deafness Research UK. £500

Atria, J.J., Figueroa, M., Tang, K., and Schoof, T. The Big Data Hackathon, Data Science London. Second Prize for the Data Visualization Challenge (in 24 hours): develop a data visualization based on data provided by Peerindex. www.mauriciofigueroa.cl/twitter

2011

Schoof, T., and Rosen, S. *Developing expertise in the measuring and interpretation of auditory brainstem responses to speech*. Flexi grant (travel grant), Action on Hearing Loss. £1608

### Teaching experience

#### Instructor

### University College London

Introduction to Event-Related Potential Technique (guest lecture: *Basic principles* of *EEG recording*)

### Northwestern University

Statistical analysis in R workshop (introductory session, co-taught with David Little) 2016

### Brentside High School, London, UK

Code club, one-day course: Introduction to programming (co-taught with Atria, J.J.) 2013

### **Teaching assistant**

### University College London

Introduction to Event-Related Potential Technique	2015
Chandler House ERP technique bootcamp	2014
Research Design and Experimental Methods	2014
Acoustics, signals & systems for audiology	2013-2014
MSc Research Design & Statistics	2011-2013
Research Methods & Statistics II	2012
Speech Sciences: Phonetics, Acoustics and Speech Perception	2011-2012

#### Private tutor

MSc Research Design & Statistics

2013

### Student mentorship

### Northwestern University

Rachel Appleton (AuD, in progress), Increasing the number of hearing aid channels for noise reduction: The effects on listening effort. *Co-supervised with Pamela Souza.* 

### University College London

Dominic Pittman (MSc Speech and Language Sciences, 2014), Using the frequency following response to investigate the basilar membrane's response to sound. *Co-supervised with Stuart Rosen.* 

- Hollyana Marler (BSc Speech Sciences, 2014), Do the effects of auditory attention extend down to the brainstem? *Co-supervised with Stuart Rosen.*
- Yang Wang (MRes Speech Language and Cognition, 2013), The effects of attention on the frequency following response. *Co-supervised with Stuart Rosen.*
- Jingwei Zhang (MSc Language Sciences, 2013), A frequency following response (FFR) investigation of auditory efferent inhibition in the brain stem: A case of fundamental frequency rise and fall in mandarin tones. *Co-supervised with Pete Howell, Jyrki Tuomainen, and Eryk Walczak*.

### Professional Service

### **Conference organization**

- Frequency Following Response Workshop, Boston, MA, USA (2016). *Co-organised with Axelle Calcus and Barbara Shinn-Cunningham.*
- Frequency Following Response Workshop, London, UK (2014). Co-organised with Axelle Calcus and Stuart Rosen, in collaboration with Cécille Colin.
- Chandler House ERP meetings, University College London, Speech Hearing and Phonetic Sciences (2014). *Co-organised with Anahita Mehta and Jyrki Tuomainen*.

## Committee membership

Northwestern University Postdoctoral Forum, International Committee member (Nov 2015 – Dec 2016)

### **Public engagement**

- EEG demonstration for the market research team at The Walt Disney Company, London, UK, 27 January 2015.
- "Good listeners and smooth talkers: Spoken communication in a challenging world", a demonstration at the Royal Institution, London, UK, 20 January 2015.
- "Speaking and Listening in a Noisy World", a stand at the 2011 Royal Society Summer Exhibition, London, UK, 5 10 July 2011.

#### Ad-hoc reviewer

Journal of the Acoustical Society of America, Frontiers in Aging Neuroscience, Ear and Hearing, PLOS ONE, International Journal of Audiology, American Journal of Audiology, Helyion, Aging Neuropsychology and Cognition, Journal of the Association for Research in Otolaryngology.